

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1        1. (Currently Amended) A state-varying hybrid stream cipher operating within a  
2 computing device, comprising:

3            a first software routine to divide incoming plain text into variable-sized blocks with each  
4 block varying in size in response to variations of an internal state of the computing device, the  
5 internal state of the computing device being altered by the incoming plain text; and

6            a second software routine to convert the plain text into cipher text based on an encryption  
7 key, an internal identifier and an the internal state of the computing device.

1        2. (Currently Amended) The state-varying hybrid stream cipher of claim 1, wherein  
2 the first software routine produces the variable-sized blocks based on the encryption key, the  
3 internal identifier, and an output of a first non-linear function and the internal state of the  
4 computer device.

1        3. (Original) The state-varying hybrid cipher of claim 2, wherein each current block  
2 of the plain text is determined by (i) producing a pseudo-random sequence using a second non-  
3 linear function including the encryption key, the internal identifier and the output of the first non-  
4 linear function as inputs and (ii) accessing contents of the pseudo-random sequence as a number  
5 of data elements of the plain text forming the current block.

1        4. (Original) The state-varying hybrid cipher of claim 1 further comprising:  
2            a third software routine to determine if a plurality of random data elements are to be  
3 distributed within the cipher text and to compute a hash digest of the random data elements.

1        5. (Original) The state-varying hybrid cipher of claim 4 further comprising a fourth  
2 software routine to perform a first shuffling operation on the internal state of the computing

3 device based on the encryption key so that a single bit modification of the encryption key  
4 requires complete recalculation of the internal state of the computing device used to encrypt the  
5 random data elements.

1 6. (Currently Amended) The state-varying hybrid cipher of claim 4, wherein the  
2 second software routine further performs a second shuffling operation on the internal state of the  
3 computing device prior to encrypting the distribution of random data elements based on the  
4 encryption key and the internal identifier to mitigate a likelihood of prediction of the internal  
5 state of the computing device upon knowledge of the encryption key.

1 7. (Original) The state-varying hybrid cipher of claim 4, wherein the third software  
2 routine determines a statistical amount of random data elements distributed within the cipher text  
3 is programmable based on a percentage value entered by a user.

1 8. (Original) The state varying hybrid cipher of claim 7, wherein the distribution of  
2 random data elements within the cipher text is based on the encryption key, the internal identifier  
3 and internal state of the computing device.

1 9. (Original) The state-varying hybrid cipher of claim 1 further comprising a third  
2 software routine to distribute error correcting codes in the cipher text in order to correct  
3 modifications.

1 10. (Currently Amended) The state-varying hybrid cipher of claim 1, wherein the  
2 internal state of the computing device is periodically modified without user intervention.

1 11. (Currently Amended) The state-varying hybrid cipher of claim 1, wherein the  
2 internal state of the computing device is initialized by an Initialization Vector being a seed  
3 value based on a time value.

1 12. (Currently Amended) A computing device comprising:  
2 a memory; and

3 logic coupled to the memory, the logic to perform a state-varying stream cipher  
4 operation, controlled by at least an encryption key and an internal state of the computing device,  
5 on input data segmented in random sized blocks using the encryption key, the logic using an  
6 initialization vector being a seed value only during an encryption process with no corresponding  
7 seed value being used during a decryption process.

1 13. (Original) The computing device of claim 12, wherein the stream cipher  
2 operation involves encryption.

1 14. (Original) The computing device of claim 12, wherein the logic is an integrated  
2 circuit.

1 15. (Currently Amended) The computing device of claim 12, wherein the internal  
2 state of the computing device varies over time without user intervention.

1 16. (Original) The computing device of claim 15, wherein the variation of the  
2 internal state of the computing device is periodic being set at a time that an encryption process  
3 begins for each block of input data.

1 17. (Currently Amended) The computing device of claim 12, wherein the computing  
2 device is one of a smart card and an operating system.

1 18. (Currently Amended) The computing device of claim 12, wherein the logic of the  
2 computing device segmenting segments the input data into at least three random sized blocks  
3 with each block varying in length in response to variations of the internal state of the computing  
4 device altered by the incoming plain text.

1 19. (Currently Amended) A method for decrypting input data using a combination of  
2 stream cipher and block cipher functionality, comprising:  
3 receiving as input a cipher text formed using an initialization vector operating as a seed  
4 value, a decryption key, a percentage of random data and a unique internal identifier; and

5           reiteratively decrypting blocks of the cipher text without use of the initialization vector  
6    and using the decryption key, the percentage of random data, the unique internal identifier and  
7    a varying internal state of the computing device to recover corresponding blocks of plain text.

1           20. (Currently Amended) The method of claim 19, wherein the internal state of the  
2    computing device varies ~~ever~~-continuously over time.